## Project name: IRN AR19678293 "Development of a test for visual diagnosis of uterine diseases in cows".

Relevance: There are a number of problems in the development of the livestock industry, one of which is high morbidity and complications after childbirth, pathologies of the reproductive organs that lead to the development of infertility, a decrease in the reproductive function of cows, production and, in general, the profitability of animal husbandry.

The existing clinical and laboratory methods for diagnosing the pathology of the reproductive organs differ in many characteristics, more or less specificity and reliability. To date, the problem of diagnosing uterine pathology in dairy cows has not been completely resolved, since in the first month after calving, the uterus undergoes involution, which makes it difficult to diagnose clinical forms and the course of diseases. Diagnosis of chronic, subclinical forms of diseases is complicated by the fact that the symptoms of diseases are not clearly visible, and most often are not defined. This problem is relevant today, therefore, the search for simple, affordable and effective methods for diagnosing uterine pathologies in cows is one of the main tasks of animal reproduction.

Objective: To develop a test for the visual diagnosis of uterine diseases on different days after calving cows

## Expected results:

- A test for visual diagnosis of uterine diseases in cows will be developed and its effectiveness will be determined. The technology of using a test for visual diagnosis of uterine diseases in cows has been developed. A patent will be obtained for the developed test for the visual diagnosis of uterine diseases in cows. Clinical trials of a test for visual diagnosis of uterine diseases in cows will be carried out. A device for taking mucus and examining it in farm conditions has been developed. Recommendations have been prepared on the use of the developed test for the visual diagnosis of uterine diseases in cows.

Within the framework of the project, training of scientific personnel will be carried out: 1 doctor of PhD, 6 masters of science. 3 seminars were held for specialists in agricultural formations.

2 (two) publications will be published in peer-reviewed foreign scientific journals that are indexed in the Science Citation Index Expanded Web of Science database and (or) have a CiteScore percentile in the Scopus database of at least 65, 3 (three) articles or reviews in a peer-reviewed foreign or domestic publication recommended by the committee for quality assurance of education and science of the mes rk, 2 publications in international conferences.

A monograph "Diagnosis of involution and diseases of the uterus in cows" will be published.

## **Study group members:**

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**Information for potential users:** The developed test for visual diagnosis of uterine diseases in cows will be offered to veterinarians of laboratories, agricultural units engaged in cattle breeding to determine the norm and pathology of the uterus.